

## CLAIMS

What is claimed is:

- 1           1.       A home server comprising:  
2           a personalization engine to create personal preference information from a user  
3           regarding a content, the personal preference information being represented in a  
4           description compatible with a content analyzer in an edge server; and  
5           a content scheduler coupled to the personalization engine to schedule delivery  
6           of the content from the edge server and uploading of the personal preference  
7           information to the edge server.
- 1           2.       The home server of claim 1 further comprising:  
2           a local storage to cache the content delivered from the edge server; and  
3           a content manager coupled to the local storage to manage the cached content.
- 1           3.       The home server of claim 1 wherein the description is compatible with a  
2           metadata associated with the content.
- 1           4.       The home server of claim 3 wherein the metadata is one of a closed  
2           caption, a Resource Description Framework (RDF), motion picture expert group  
3           (MPEG)-7, TV-Anytime metadata, a Society of Motion Picture and Television  
4           Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European  
5           Broadcasting Union (EBU) P/meta.
- 1           5.       The home server of claim 1 wherein the personalization engine  
2           comprises:  
3           a deduction engine to deduce the personal preference information based on  
4           user's usage.
- 1           6.       The home server of claim 1 wherein the personalization engine  
2           comprises:  
3           an input interface to obtain the personal preference information provided by the  
4           user.

1           7.       The home server of claim 2 wherein the content manager comprises:  
2           a retriever to retrieve the cache content;  
3           an indexer to index the cache content; and  
4           a distributor to distribute the retrieved cache content to a device.

1           8.       The home server of claim 7 wherein the content manager further  
2 comprises:  
3           a decryptor to decrypt the cache content; and  
4           an archiver to archive the cached content.

1           9.       The home server of claim 7 wherein the device is one of a viewing  
2 device, a personal digital assistant (PDA), an audio visual device, a tablet, a personal  
3 computer, a set-top box, a digital television set, and a wireless device.

1           10.      An edge server comprising:  
2           a content analyzer to analyze a content received from a media source based on a  
3 description compatible with personal preference information from a user regarding the  
4 content, the personal preference information being provided by a home server; and  
5           a content filter coupled to the content analyzer to filter the content according to  
6 the personal preference information for delivery to the user.

1           11.      The edge server of claim 10 further comprising:  
2           a content assembler to assemble the filtered content using the description into a  
3 packaged content according to an assembly criterion; and  
4           a content distributor coupled to the content assembler to distribute the packaged  
5 content to the user based on delivery information provided by the home server.

1           12.      The edge server of claim 10 wherein the media source is one of a Web  
2 content, a television broadcast, a media broadcast, a video program, an audio program,  
3 and an audio visual program.

1           13.      The edge server of claim 10 wherein the description is compatible with a  
2 metadata associated with the content.

1           14.     The edge server of claim 13 wherein the metadata is one of a closed  
2     caption, a Resource Description Framework (RDF), motion picture expert group  
3     (MPEG)-7, a TV-Anytime metadata, a Society of Motion Picture and Television  
4     Engineers (SMPTE) metadata dictionary, a Dublin Core descriptor, and an European  
5     Broadcasting Union (EBU) P/meta.

1           15.     The edge server of claim 10 wherein the assembly criterion is one of a  
2     semantic topic and a subscription level.

1           16.     The edge server of claim 10 wherein the delivery information includes at  
2     least a scheduled time, a quality of service information, and a transmission bandwidth.

1           17.     The edge server of claim 13 wherein the content analyzer comprises:  
2     a parser to parse the metadata.

1           18.     The edge server of claim 10 wherein the content analyzer comprises:  
2     a metadata creator to create a metadata associated with the content.

1           19.     The edge server of claim 10 wherein the content filter comprises:  
2     a matcher to match the description with the personal preference information.

1           20.     A method comprising:  
2     creating personal preference information from a user regarding a content, the  
3     personal preference information being represented in a description compatible with a  
4     content analyzer in an edge server; and  
5     scheduling delivery of the content from the edge server and uploading of the  
6     personal preference information to the edge server.

1           21.     The method of claim 20 further comprising:  
2     caching the content delivered from the edge server; and  
3     managing the cached content.

1           22.     The method of claim 20 wherein the description is compatible with a  
2     metadata associated with the content.

1           23.     The method of claim 22 wherein the metadata is one of a closed caption,  
2     a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,  
3     TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4     metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5     (EBU) P/meta.

1           24.     The method of claim 20 wherein creating personal preference  
2     information comprises:  
3           deducing the personal preference information based on user's usage.

1           25.     The method of claim 20 wherein creating personal preference  
2     information comprises:  
3           obtaining the personal preference information provided by the user.

1           26.     The method of claim 21 wherein scheduling delivery comprises:  
2           retrieving the cache content;  
3           indexing the cache content; and  
4           distributing the retrieved cache content to a device.

1           27.     The method of claim 26 wherein scheduling delivery further comprises:  
2           decrypting the cache content; and  
3           archiving the cached content.

1           28.     The method of claim 26 wherein the device is one of a viewing device, a  
2     personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a  
3     set-top box, a digital television set, and a wireless device.

1           29.     A method comprising:  
2           analyzing a content received from a media source based on a description  
3     compatible with personal preference information from a user regarding the content, the  
4     personal preference information being provided by a home server; and  
5           filtering the content according to the personal preference information for  
6     delivery to the user.

1           30.     The method of claim 29 further comprising:  
2           assembling the filtered content using the description into a packaged content  
3           according to an assembly criterion; and  
4           distributing the packaged content to the user based on delivery information  
5           provided by the home server.

1           31.     The method of claim 29 wherein the media source is one of a Web  
2           content, a television broadcast, a media broadcast, a video program, an audio program,  
3           and an audio visual program.

1           32.     The method of claim 29 wherein the description is compatible with a  
2           metadata associated with the content.

1           33.     The method of claim 32 wherein the metadata is one of a closed caption,  
2           a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a  
3           TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4           metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5           (EBU) P/meta.

1           34.     The method of claim 29 wherein the assembly criterion is one of a  
2           semantic topic and a subscription level.

1           35.     The method of claim 29 wherein the delivery information includes at  
2           least a scheduled time, a quality of service information, and a transmission bandwidth.

1           36.     The method of claim 32 wherein analyzing comprises:  
2           parsing the metadata.

1           37.     The method of claim 29 wherein analyzing comprises:  
2           creating a metadata associated with the content.

1           38.     The method of claim 29 wherein filtering comprises:  
2           matching the description with the personal preference information.

1           39.     A system comprising:  
2           a media source to provide a media content;  
3           an edge server connected to a network; and  
4           a home server coupled to the edge server via the network, the home sever  
5 comprising:  
6           a personalization engine to create personal preference information from  
7           a user regarding a content, the personal preference information being  
8           represented in a description compatible with a content analyzer in the  
9           edge server; and  
10          a content scheduler coupled to the personalization engine to schedule  
11          delivery of the content from the edge server and uploading of the  
12          personal preference information to the edge server.

1           40.     The system of claim 39 further comprising:  
2           a local storage to cache the content delivered from the edge server; and  
3           a content manager coupled to the local storage to manage the cached content.

1           41.     The system of claim 39 wherein the description is compatible with a  
2 metadata associated with the content.

1           42.     The system of claim 41 wherein the metadata is one of a closed caption,  
2 a Resource Description Framework (RDF), motion picture expert group (MPEG)-7,  
3 TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4 metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5 (EBU) P/meta.

1           43.     The system of claim 39 wherein the personalization engine comprises:  
2           a deduction engine to deduce the personal preference information based on  
3 user's usage.

1           44.     The system of claim 39 wherein the personalization engine comprises:  
2           an input interface to obtain the personal preference information provided by the  
3 user.

1        45.     The system of claim 40 wherein the content manager comprises:  
2        a retriever to retrieve the cache content;  
3        an indexer to index the cache content;  
4        a distributor to distribute the retrieved cache content to a device.

1        46.     The system of claim 45 wherein the content manager further comprises:  
2        a decryptor to decrypt the cache content; and  
3        an archiver to archive the cached content.

1        47.     The system of claim 45 wherein the device is one of a viewing device, a  
2        personal digital assistant (PDA), an audio visual device, a tablet, a personal computer, a  
3        set-top box, a digital television set, and a wireless device.

1        48.     A system comprising:  
2        a media source to provide a media content;  
3        a home server connected to a network; and  
4        an edge server coupled to the home server via the network, the edge server  
5        comprising:  
6            a content analyzer to analyze a content received from a media source  
7            based a description compatible with personal preference information  
8            from a user regarding the content, the personal preference information  
9            being provided by a home server; and  
10          a content filter coupled to the content analyzer to filter the content  
11          according to the personal preference information for delivery to the user.

1        49.     The system of claim 48 further comprising:  
2        a content assembler to assemble the filtered content using the description into a  
3        packaged content according to an assembly criterion; and  
4        a content distributor coupled to the content assembler to distribute the packaged  
5        content to the user based on delivery information provided by the home server.

1        50.     The system of claim 48 wherein the media source is one of a Web  
2        content, a television broadcast, a media broadcast, a video program, an audio program,  
3        and an audio visual program.

1           51.     The system of claim 48 wherein the description is compatible with a  
2     metadata associated with the content.

1           52.     The system of claim 51 wherein the metadata is one of a closed caption,  
2     a Resource Description Framework (RDF), motion picture expert group (MPEG)-7, a  
3     TV-Anytime metadata, a Society of Motion Picture and Television Engineers (SMPTE)  
4     metadata dictionary, a Dublin Core descriptor, and an European Broadcasting Union  
5     (EBU) P/meta.

1           53.     The system of claim 48 wherein the assembly criterion is one of a  
2     semantic topic and a subscription level.

1           54.     The system of claim 48 wherein the delivery information includes at  
2     least a scheduled time, a quality of service information, and a transmission bandwidth.

1           55.     The system of claim 51 wherein the content analyzer comprises:  
2     a parser to parse the metadata.

1           56.     The system of claim 48 wherein the content analyzer comprises:  
2     a metadata creator to create a metadata associated with the content.

1           57.     The system of claim 48 wherein the content filter comprises:  
2     a matcher to match the description with the personal preference information.